

Global e-waste surging: Up 21% in 5 years

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E-waste -- discarded products with a battery or plug -- will reach 74 Mt by 2030, almost a doubling of e-waste in just 16 years. This makes e-waste the world's fastest-growing domestic waste stream, fueled mainly by higher consumption rates of electric and electronic equipment, short life cycles, and few options for repair. Credit: Yassyn Sidki

A record 53.6 million metric tons (Mt) of electronic waste was generated



worldwide in 2019, up 21% in just five years, according to the UN's Global E-waste Monitor 2020.

The new report also predicts global <u>e-waste</u>—discarded products with a battery or plug—will reach 74 Mt by 2030, almost a doubling of e-waste in just 16 years. This makes e-waste the world's fastest-growing domestic waste stream, fueled mainly by higher consumption rates of electric and <u>electronic equipment</u>, short life cycles, and few options for repair.

Only 17.4% of 2019's e-waste was collected and recycled. This means that gold, silver, copper, platinum and other high-value, recoverable materials conservatively valued at US \$57 billion—a sum greater than the Gross Domestic Product of most countries—were mostly dumped or burned rather than being collected for treatment and reuse.

According to the report, Asia generated the greatest volume of e-waste in 2019, some 24.9 Mt, followed by the Americas (13.1 Mt) and Europe (12 Mt), while Africa and Oceania generated 2.9 Mt and 0.7 Mt respectively.

For perspective, last year's e-waste weighed substantially more than all the adults in Europe, or as much as 350 cruise ships the size of the Queen Mary 2, enough to form a line 125 km long.





Asia generated the greatest volume of e-waste in 2019, some 24.9 Mt, followed by the Americas (13.1 Mt) and Europe (12 Mt), while Africa and Oceania generated 2.9 Mt and 0.7 Mt respectively. Credit: UN Global eWaste Monitor

E-waste is a health and environmental hazard, containing toxic additives or hazardous substances such as mercury, which damages the human brain and/or coordination system.

Other key findings from the Global E-waste Monitor 2020:



- Proper e-waste management can help mitigate global warming. In 2019, an estimated 98 Mt of CO2-equivalents were released into the atmosphere from discarded fridges and air-conditioners, contributing roughly 0.3 % of global greenhouse gas emissions
- In per capita terms, last year's discarded e-waste averaged 7.3 kg for every man, woman and child on Earth
- Europe ranked first worldwide in terms of e-waste generation per capita with 16.2 kg per capita. Oceania came second (16.1 kg) followed by the Americas (13.3 kg). Asia and Africa were much lower: 5.6 and 2.5 kg respectively
- E-waste is a health and environmental hazard, containing toxic additives or hazardous substances such as mercury, which damages the human brain and / or coordination system. An estimated 50 tons of mercury—used in monitors, PCBs and fluorescent and energy-saving light sources—are contained in undocumented flows of e-waste annually
- E-waste in 2019 was mainly comprised of small <u>equipment</u> (17.4 Mt), large equipment (13.1 Mt), and temperature exchange equipment (10.8 Mt). Screens and monitors, small IT and telecommunication equipment, and lamps represented 6.7 Mt, 4.7 Mt, and 0.9 Mt respectively
- Since 2014 the e-waste categories increasing fastest in total weight terms: temperature exchange equipment (+7 %), large equipment (+5 %), lamps and small equipment (+4 %).

 According to the report, this trend is driven by the growing consumption of those products in lower income countries, where those products improve the living standards. Small IT and telecommunication equipment have been growing more slowly, and screens and monitors have shown a slight decrease (-1 %), explained largely by lighter flat panel displays replacing heavy CRT monitors and screens
- Since 2014, the number of countries that have adopted a national e-waste policy, legislation or regulation in place has increased



from 61 to 78. While a positive trend, this is far from the target set by the International Telecommunication Union which is to raise the percentage of countries with an e-waste legislation to 50 %

The Global E-waste Monitor 2020 is a collaborative product of the Global E-waste Statistics Partnership (GESP), formed by UN University (UNU), the International Telecommunication Union (ITU), and the International Solid Waste Association (ISWA), in close collaboration with the UN Environment Programme (UNEP). The World Health Organization (WHO) and the German Ministry of Economic Cooperation and Development (BMZ) also substantially contributed to this year's Global E-waste Monitor 2020.







Cooling and heating devices (+7 per cent) have been the e-waste categories rising fastest in total weight terms since 2014, followed by large equipment (+5 per cent), lamps and small equipment (+4 per cent). driven by the growing consumption of those products in lower income countries. Small IT and telecommunication equipment have been growing more slowly, and screens and monitors have shown a slight decrease (-1 per cent), explained largely by lighter flat panel displays replacing heavy CRT monitors and screens. Credit: UNU/UNITAR SCYCLE

Provided by United Nations University / ITU / UNITAR

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